

Testwale Current Affairs PDF

[illegible]

1. Indian company ReNew signs an agreement with the Egyptian government to set up Green Hydrogen plant in Egypt (Nov. 16, 2022)

ReNew signs set up Green Hydrogen plant in Egypt

The Indian company **ReNew Power Private Limited** , has signed an agreement with the Egyptian government to set up a **green hydrogen manufacturing facility** at the Suez Canal Economic Zone in Egypt on 15 November 2022. The company will invest \$8 billion in the project in phases.

Green Hydrogen refers to the breaking down of the water molecule into hydrogen and oxygen using renewable sources of energy.

ReNew Power has partnered with Elsewedy Electric S.A.E. (Elsewedy) for this project. Elsewedy is a leading integrated energy solutions provider in the Middle East and Africa, which will be the local co-developer for the project.

Highlights of the project

According to the agreement, ReNew will set up a plant with a capacity to produce **20,000 tonne green hydrogen a year**, which will later be raised to 220,000 tonnes, by relying on renewable energy sources.

The project is scheduled to be implemented in phases, the first of which will be a pilot to produce 20,000 tonne green hydrogen, through a 150 MW electrolyser equipped with 570 MW of renewable energy to produce 100,000 tons of **green ammonia** annually.

What is Green Hydrogen, Brown Hydrogen, Blue Hydrogen?

Hydrogen is the first and the smallest element in the periodic table.

Depending upon the production method the colour of the hydrogen can be Green, Brown, Blue or Grey.

Green Hydrogen

It refers to the breaking down of the water molecule into hydrogen and oxygen using renewable sources of energy. Renewable source of energy means which can be used again and again like solar power, hydel, wind energy etc. It contains no carbon which is responsible for global warming.

Grey Hydrogen

Grey hydrogen is created from natural gas, or methane, using steam methane reformation. It produces Hydrogen and Carbon dioxide which is released in the atmosphere.

Blue Hydrogen

Blue hydrogen is produced mainly from natural gas, using a process called steam reforming, which brings together natural gas and heated water in the form of steam. It produces hydrogen and carbon dioxide.

Black and Brown Hydrogen

When black coal or lignite (brown coal) is used in the hydrogen-making process it is called as black or brown coal.

ReNew Company

ReNew is one of the largest renewable energy independent power producers globally. ReNew develops, builds, owns and operates utility-scale wind energy, solar energy and hydro projects.

As of October 10, 2022, ReNew has a gross total portfolio of **13.4 GW** of renewable energy projects across India, including commissioned and committed projects.

The company has also announced investing one lakh crore in renewable energy projects, including battery storage in both Maharashtra and Karnataka.

Founder Chairman and CEO of the Company: **Sumant Sinha**